Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
14	KSRRB M800-13.**Road Marking** with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (P.No-185,I No-24.15)								
	KHB Colony								
	1st Main	2.5	167.50	0.10		41.88			
	1st Cross	2.5	47.20	0.10		11.80			
	Cross road	2.5	113.00	0.10		28.25			
	2nd cross	2.5	43.10	0.10		10.78			
						92.70	**Sqm**	**542.72**	**50,310.14**
15	**Loading and unloading** of stone boulders/stone aggregates/sand/kankar/Moorum including all lead and lift and as per specification and direction of the Engineer in charge of the work.(P.No-134,I No-17.2)								
	From item no. 3					132.57			
	From item no. 5					828.15			
						960.72	**Cum**	**68.00**	**65,328.62**
16	**Cost of haulage** Excluding loading and unloading including all lead and lift and as per specification and direction of the Engineer in charge of the work., 20 Km lead								
	From item no. 3					132.57			
	From item no. 5					828.15			
						960.72	**Cum**	**64.00**	**61,485.76**
								Total Construction Cost	**3499677.17**
								Sub Total	**3499677.17**
								Utility Shifting,Miscellaneous and Rounding off	**322.83**
								GRAND TOTAL	**3500000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017, issue rates and Data Rates.

Assistant Engineer
Yelahanka Project Division,
BBMP Bangalore

Asst. Executive Engineer,
Yelahanka Project Division,
BBMP Bangalore

Executive Engineer 7/8/17
Yelahanka Project Division,
BBMP Bangalore

Excecutive Engineer Yelahanka Project Division
Bruhat Bangalore Mahanagara Palike

Name of Work: Improvements and Asphalting to Sugappa layout cross roads in Ward No. 01

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	**Removing B.S.** slab of Drain and stacking.(P.No-25 I No-5.32)								
	Sugappa layout								
	1st Cross	2	130.00	0.75		195.00			
	2nd cross	2	80.00	0.75		120.00			
	3rd Cross	2	60.00	0.75		90.00			
	4th Cross	2	30.00	0.75		45.00			
	Connecting Road-1	2	20.00	0.75		30.00			
	Connecting Road-2	2	20.00	0.75		30.00			
						510.00	**Sqm**	**65.72**	**33,517.20**
2	**Refixing** stone slabs of drains and pointing in C.M (1:3).(P-25, I.No-5.33)								
	Sugappa layout								
	1st Cross	2	130.00	0.75		195.00			
	2nd cross	2	80.00	0.75		120.00			
	3rd Cross	2	60.00	0.75		90.00			
	4th Cross	2	30.00	0.75		45.00			
	Connecting Road-1	2	20.00	0.75		30.00			
	Connecting Road-2	2	20.00	0.75		30.00			
						510.00			
	Deduct Damaged/missing 10%					51.00			
						459.00	**Sqm**	**80.56**	**36,977.04**
3	KSRRB 300-1. **Earthwork excavation** by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete asper specifications.MORTH / Chapter 3(I No-19.1, P No-142)								
	Desilt								
	Sugappa layout								
	1st Cross	2	213.00	0.45	0.50	95.85			
	2nd cross	2	148.00	0.45	0.50	66.60			
	3rd Cross	2	109.00	0.45	0.50	49.05			
	4th Cross	2	64.00	0.45	0.50	28.80			
	Connecting Road-1	2	36.20	0.45	0.50	16.29			
	Connecting Road-2	2	35.30	0.45	0.50	15.89			
	Culverts	3	7.00	1.80	1.00	37.80			
						310.28	**Cum**	**86.92**	**26,969.10**
4	KSRB 4-1.2 : Providing and laying in position plain **cement concrete of mix 1:3:6** with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. (P.No-12,I No-4.2)								
	Culverts	3	7.00	1.80	0.15	5.67			
						5.67	**Cum**	**5348.76**	**30,327.47**
5	KSRB 5.2-3 : Providing and constructing granite / trap / basalt **size stone masonry** in foundation cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. (I No-5.6,P No-23)								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Culverts	6	7.00	0.45	0.75	14.18			
						14.18	**Cum**	**4438.22**	**62,911.77**
6	KSRB 4-1.6 ; Providing and laying in position plain **cement concrete of mix 1:2:4** with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications.(P.No-12,I No-4.6)								
	Culverts, Coping	6	7.00	0.45	0.10	1.89			
	Culverts, Bed	3	7.00	0.60	0.10	1.26			
						3.15	**Cum**	**5767.46**	**18,167.50**
7	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Culverts	3	7.00	1.50		31.50			
						31.50	**Sqm**	**5317.00**	**167485.50**
8	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Missing/ Damaged								
	From item No. 2					51.00			
	Sugappa layout								
	1st Cross	1	20.00	0.75		15.00			
	2nd cross	1	15.00	0.75		11.25			
	Connecting Road-1	1	10.00	0.75		7.50			
	Connecting Road-2	1	10.00	0.75		7.50			
						92.25	**Cum**	**1900.00**	**175275.00**
9	KSRRB M300-14. **Excavation for roadwork** in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1km and complete as per specifications. MORTH Specification No.301 (P.No-143,I No-19.14)								
	Sugappa layout								
	1st Cross	1	150.00	5.05	0.250	189.38			
		2	73.00	0.90	0.300	39.42			
	2nd cross	1	148.00	4.40	0.250	162.80			
	3rd Cross	1	109.00	4.10	0.250	111.73			
	4th Cross	1	25.00	4.00	0.300	30.00			
	Ugd Cut Portion	1	40.00	0.90	0.300	10.80			
	Connecting Road-1	1	36.20	5.90	0.300	64.07			
	Connecting Road-2	1	35.30	4.60	0.300	48.71			
	Debris	3	6.00	2.00	0.250	9.00			
						665.91	**Cum**	**48.76**	**32,469.67**
10	KSRRB 300-58. **Compaction of original ground** with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 (P.No-149, I No-19.64)								
	Sugappa layout								
	1st Cross	1	150.00	5.05		757.50			
		2	73.00	0.90		131.40			
	2nd cross	1	148.00	4.40		651.20			
	3rd Cross	1	109.00	4.10		446.90			

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	4th Cross	1	25.00	4.00		100.00			
	Ugd Cut Portion	1	40.00	0.90		36.00			
	Connecting Road-1	1	36.20	5.90		213.58			
	Connecting Road-2	1	35.30	4.60		162.38			
						2498.96	**Sqm**	**5.30**	**13,244.49**
11	KSRRB M400-6.1. Construction of **granular sub-base** by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. (P.No-155,I No-20.4.2)								
	Sugappa layout								
	1st Cross	1	150.00	5.05	0.100	75.75			
		2	73.00	0.90	0.100	13.14			
	2nd cross	1	148.00	4.40	0.150	97.68			
	3rd Cross	1	109.00	4.10	0.150	67.04			
	4th Cross	1	25.00	4.00	0.150	15.00			
	Ugd Cut Portion	1	40.00	0.90	0.150	5.40			
	Connecting Road-1	1	36.20	5.90	0.150	32.04			
	Connecting Road-2	1	35.30	4.60	0.150	24.36			
						330.40	**Cum**	**1665.26**	**550200.24**
12	KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No-158,I No-20.18)								
	Sugappa layout								
	1st Cross	1	150.00	5.05	0.225	170.44			
		2	73.00	0.90	0.225	29.57			
	2nd cross	1	148.00	4.40	0.225	146.52			
	3rd Cross	1	109.00	4.10	0.225	100.55			
	4th Cross	1	25.00	4.00	0.225	22.50			
	Ugd Cut Portion	1	40.00	0.90	0.225	8.10			
	Connecting Road-1	1	36.20	5.90	0.225	48.06			
	Connecting Road-2	1	35.30	4.60	0.225	36.54			
						562.27	**Cum**	**1768.08**	**994131.27**
13	KSRRB M500-6.Providing and applying **primer coat** with S.S bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. (P.No-161,I No-21.6)								
	Sugappa layout								
	1st Cross	1	150.00	5.05		757.50			
		2	73.00	0.90		131.40			
	2nd cross	1	148.00	4.40		651.20			
	3rd Cross	1	109.00	4.10		446.90			
	4th Cross	1	25.00	4.00		100.00			
	Ugd Cut Portion	1	40.00	0.90		36.00			
	Connecting Road-1	1	36.20	5.90		213.58			
	Connecting Road-2	1	35.30	4.60		162.38			
						2498.96	**Sqm**	**27.56**	**68,871.34**

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
14	KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade Sqm bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.(P.No-161,I No-21.9)								
	For DBM								
	Sugappa layout								
	1st Cross	1	150.00	5.05		757.50			
		2	73.00	0.90		131.40			
	2nd cross	1	148.00	4.40		651.20			
	3rd Cross	1	109.00	4.10		446.90			
	4th Cross	1	25.00	4.00		100.00			
	Ugd Cut Portion	1	40.00	0.90		36.00			
	Connecting Road-1	1	36.20	5.90		213.58			
	Connecting Road-2	1	35.30	4.60		162.38			
	For BC								
	Sugappa layout								
	1st Cross	1	213.00	5.65		1203.45			
	2nd cross	1	148.00	4.40		651.20			
	3rd Cross	1	109.00	4.10		446.90			
	4th Cross	1	64.00	4.00		256.00			
	Connecting Road-1	1	36.20	5.90		213.58			
	Connecting Road-2	1	35.30	4.60		162.38			
						5432.47	**Sqm**	**19.08**	**103651.53**
15	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. MORTH Specification No. 507 using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-163,I No-21.17.6)								
	Sugappa layout								
	1st Cross	1	150.00	5.05	0.05	37.88			
		2	73.00	0.90	0.05	6.57			
	2nd cross	1	148.00	4.40	0.05	32.56			
	3rd Cross	1	109.00	4.10	0.05	22.35			
	4th Cross	1	25.00	4.00	0.05	5.00			
	Ugd Cut Portion	1	40.00	0.90	0.05	1.80			
	Connecting Road-1	1	36.20	5.90	0.05	10.68			
	Connecting Road-2	1	35.30	4.60	0.05	8.12			
						124.95	**Cum**	**6284.74**	**785265.69**
16	KSRRB M500-19. Providing and laying **bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder a and filler, transporting the hot mix to work site, laying with a paver finisher with to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 509 complete in all respects as per specifications. using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 5.4% VG-30 Bitumen(P.No-165,I No-21.22.6)								
	Sugappa layout								
	1st Cross	1	213.00	5.65	0.03	36.10			
	2nd cross	1	148.00	4.40	0.03	19.54			
	3rd Cross	1	109.00	4.10	0.03	13.41			
	4th Cross	1	64.00	4.00	0.03	7.68			